Division Of Environmental Health And Communicable Disease Prevention — Office Of Surveillance

COMMUNICABLE DISEASE SURVEILLANCE NEWSLETTER

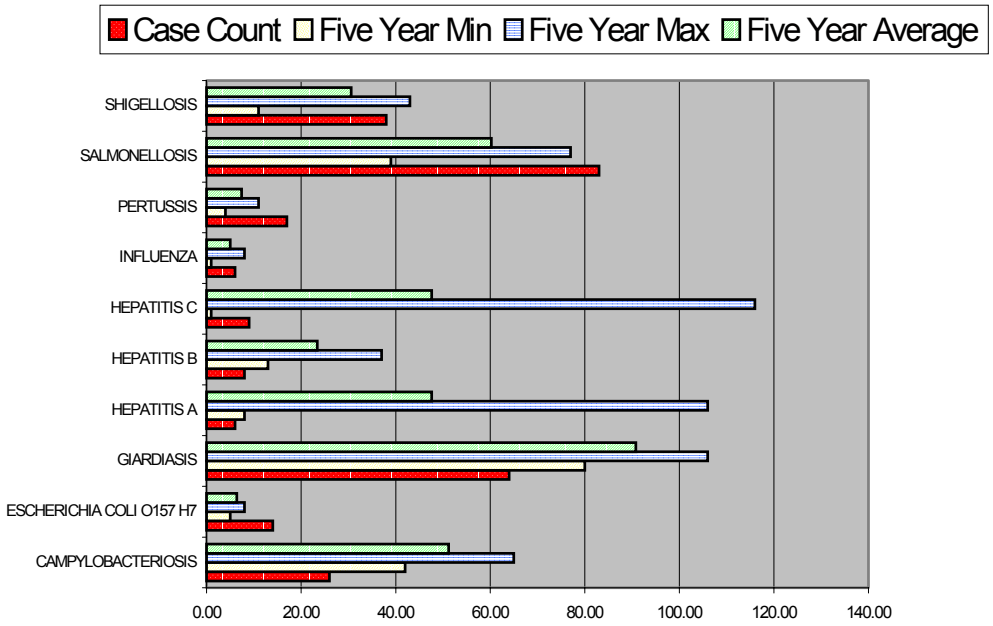
Volume 1, Issue 10 | October 2002

INSIDE THIS ISSUE:

Top Ten Diseases Year To Date

Influenza	**4214**
Hepatitis C (Chronic and Acute)	1044
Salmonella	785
Campylobacter	506
Giardia	455
Shigellosis	177
Pertussis	134
Hepatitis B	103
Rocky Mountain Spotted Fever	90
Hepatitis A	78

Top Ten Reported Diseases For October 2002, Missouri



Campylobacter is lower than the average of 51 cases at 26. E. coli O157:H7 is above the five year maximum for October. Giardia is lower than the five year average of 91 cases. Viral Hepatitis is down across the board with A, B and C being below their five year averages. Confirmed influenza by rapid antigen test has been reported, but only six for October slightly above the average. Pertussis while not part of a specific outbreak has been elevated for the year and for October. Salmonella and Shigellosis are elevated

Elevated Diseases October Case Count With Five Year Average and Maximum

	Count	Average	Maximum
E. coli O157:H7	14	6.4	8
Influenza	6	5.0	8
Pertussis	17	7.4	11
Salmonella	83	60.2	77
Shigellosis	38	30.6	43

October Diseases 2002

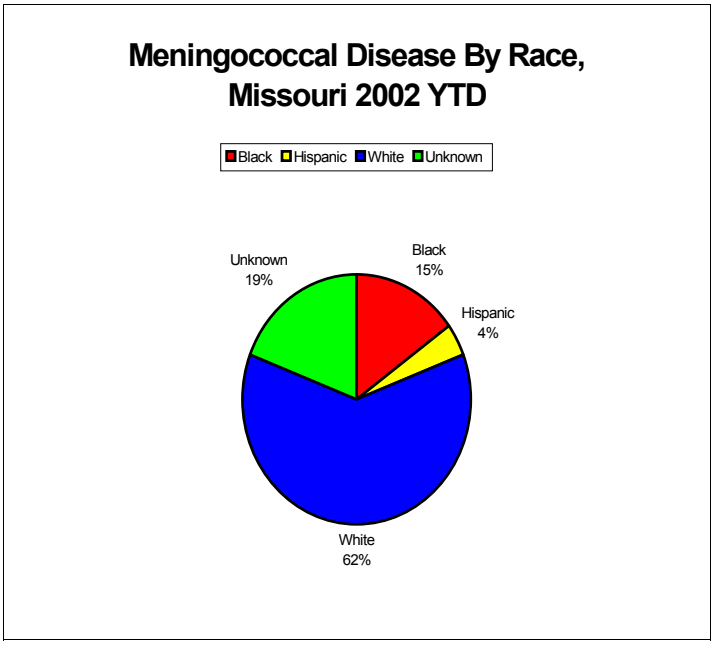
Salmonellosis	**83**	Meningococcal Disease	**3**
Giardiasis	64	Legionellosis	2
Shigellosis	38	Listeriosis	2
Campylobacter	26	Rocky Mountain Spotted Fever	2
Pertussis	17	Ehrlichiosis HME	1
E. coli O157:H7	14	Encephalitis West Nile	1
Hepatitis C (Acute &Chronic)	9	Lyme	1
Hepatitis B	8	Malaria	1
Hepatitis A	6	Streptococcal Disease Invasive	1
Influenza (Confirmed)	6	Streptococcus pneumoniae	1
Animal Rabies	5		

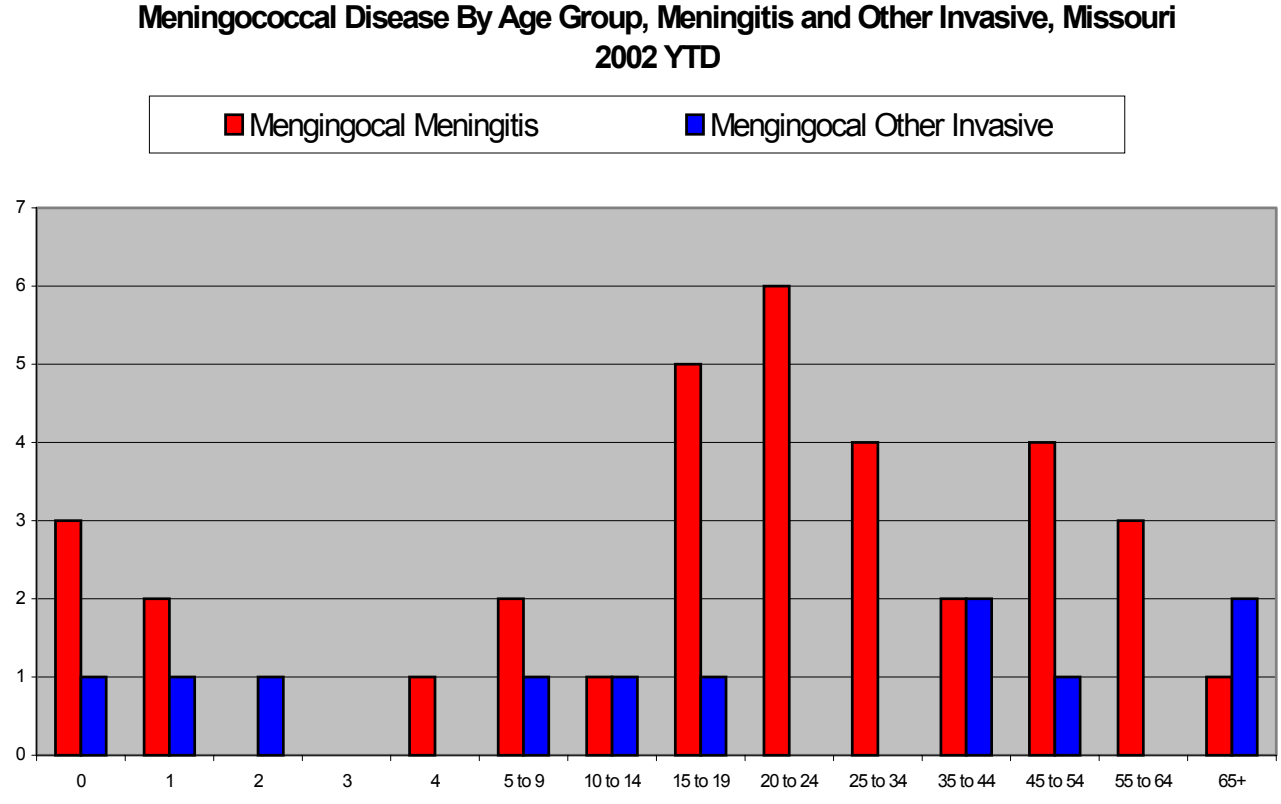
Provisional data, Monday, December 16, 2002

Disease By Serogroup or Risk Factor: Meningococcal Disease

Meningococcal disease is a bacterial infection caused by *Neisseria meningitidis*. When this bacteria affects the lining of the brain and spinal cord (the meninges), the condition is called meningococcal meningitis. It is a relatively rare disease and usually occurs as a single event. Even clusters of cases or outbreaks are rare in the United States. *Neisseria meningitidis* can cause meningococcemia, which is a more serious infection of the blood stream. Other normally sterile sites (e.g. joints) may become involved. These infections may lead to death. There have been 47 cases of Meningococcal Disease reported in Missouri Year to Date. There were 93 cases reported in 1997, 75 in 1998, 83 in 1999, 65 in 2000 and 53 in 2001, so the number of cases YTD is falling. However there is still concern about this disease because of outbreaks in a military base, and some small clusters of disease in school aged children and a very young infant. Prophylaxis using a vaccine for group C was done in many of the these clusters. Another important factor for this disease in Missouri, Blacks represent less than 11% of the population but are 15% of the cases of meningococcal disease.

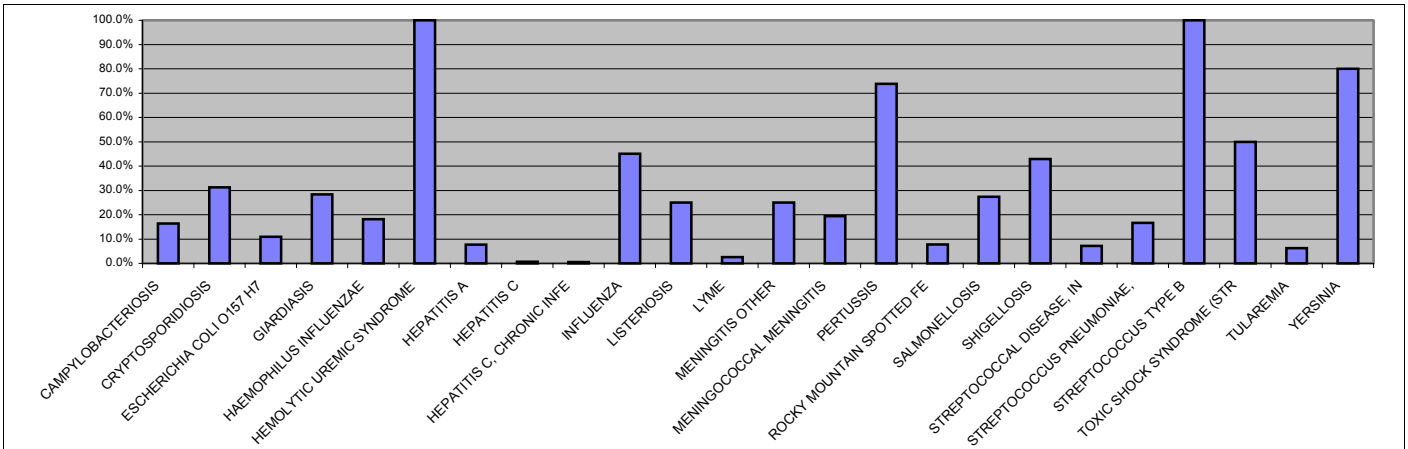
Meningococcal Disease By Serogroup	
Group B	**6**
Group C	**20**
Group Y	**3**
Untyped	**18**





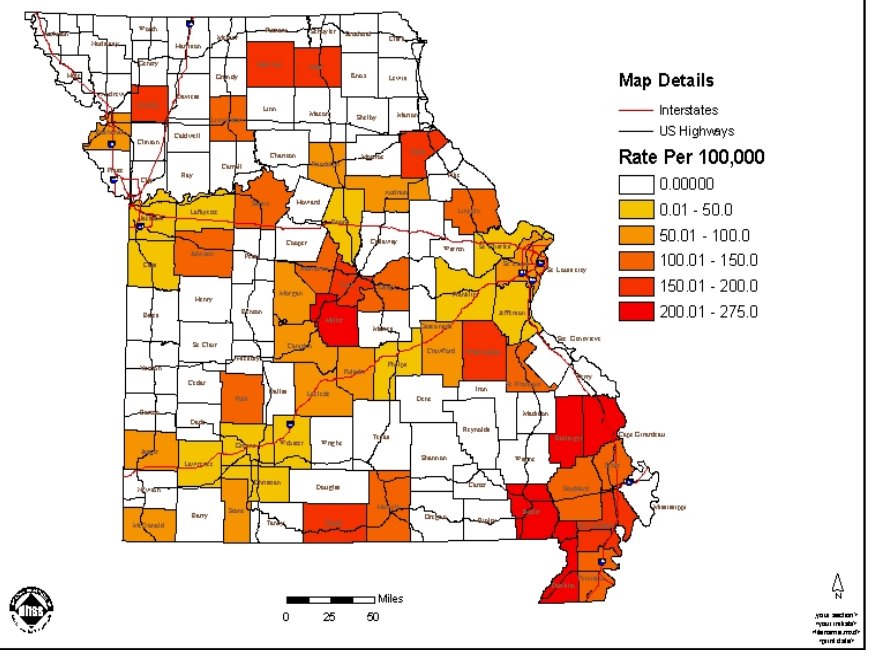
Diseases In Children

Percent of Disease Cases Who Are Children Five and Under



October is the month in which children fall prey to a number of seasonal conditions. This is the time to be especially alert for viruses such as Norwalk (Norovirus), Rotovirus, Adenovirus and Respiratory Syncytial Virus (RSV). Influenza is also a problem for children, and so the Advisory Committee on Immunization Practices (ACIP) is recommending Influenza vaccination for children 6-23 months. Childcare is a place where children can acquire disease. We have limited data for childcare, however of the children who were in or who had a household contact who was in childcare, we received reports of ten cases of Campylobacter, two cases of Cryptosporidiosis, twenty-six cases of Giardia, one case of meningococcal Meningitis, twenty seven cases of Salmonella and thirty one cases of Shigellosis.

Salmonella Rates Per 100,000 In Children 0-4, Missouri 2002 Year To Date



Disease In Children Five and Under, October 2002

Age In Years	< 1 (All cases reports were 0– 6 months)	1	2	3	4	5
Campylobacter	1	2	0	0	0	0
E coli	0	0	0	0	1	0
Giardia	0	5	8	1	1	5
Hepatitis A	0	0	0	0	1	0
Listeria	1	0	0	0	0	0
Meningococcal Disease	0	0	1	0	0	0
Pertussis	11	1	1	0	1	1
Salmonella	6	3	6	3	2	4
Shigellosis	2	1	7	1	2	5

Cases of Salmonella in children < 5 reflect the increased rate of Salmonella in all age groups within the Southeastern part of the state. Cases have increased in that part of the state without being associated with any as yet known outbreaks. We continue to monitor this increase.

We Must Protect the Harvest That is Our Children

Missouri Department Of Health And Senior Services

Division Of Environmental Health And Communicable Disease Prevention – Office Of Surveillance

930 Wildwood
PO Box 570
Jefferson City, MO 65102

Phone: 573-751-9071
Fax: 573-751-6417
Email: fobbsm@dhss.state.mo.us

Holidays should be fun not time for outbreaks of foodborne illness Prepare safe meals

Next Issue:

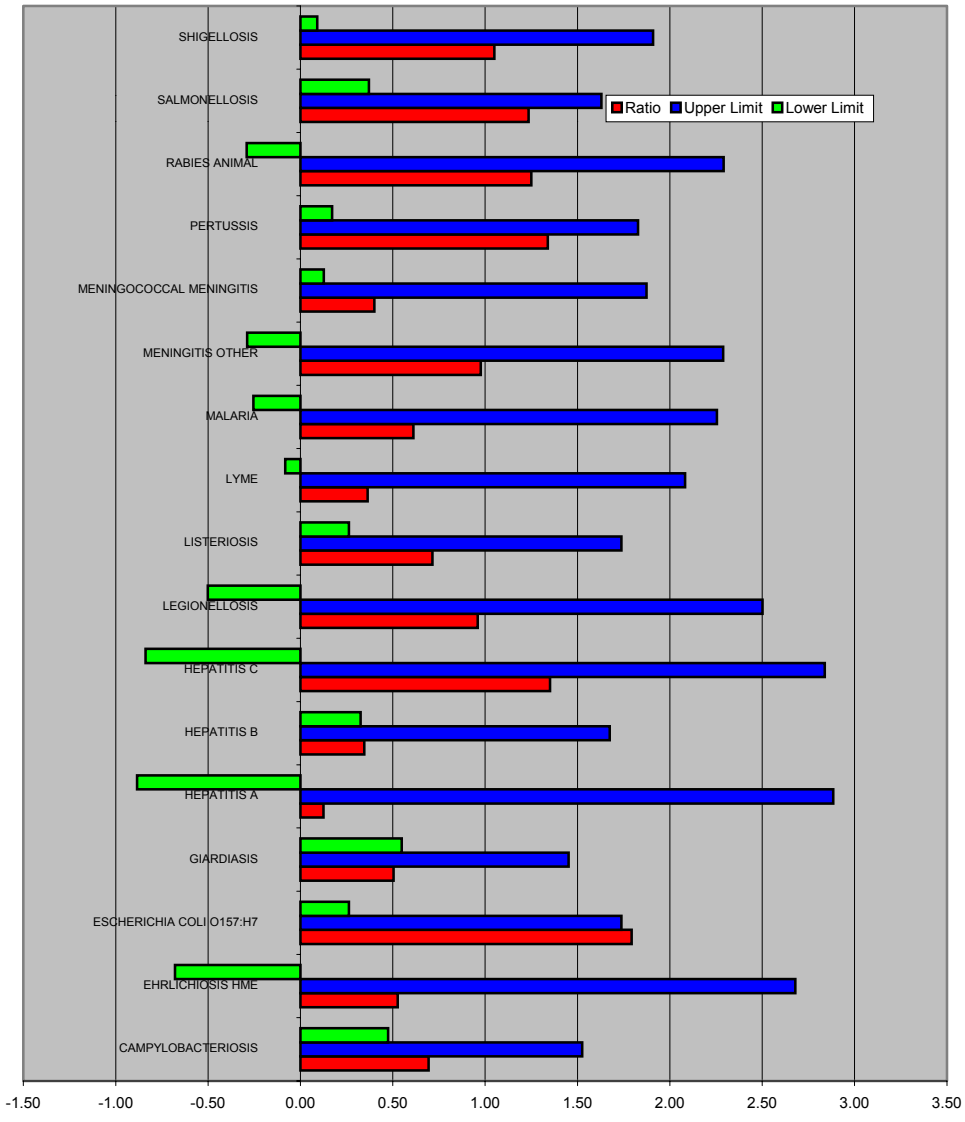
- *Communicable Disease Monthly*
- *Special Feature: Norwalk-like virus:to cruise or not to cruise*
- *Smallpox vaccinations and Vaccina*
- *Carbon Monoxide*
- *Emergency Reporting Rule*

News From The Lab

"Although E. coli O157:H7 is widely recognized as an important cause of foodborne illness in the U.S., other Shiga-toxin producing E. coli (non-O157 STEC) can also cause diarrhea, hemorrhagic colitis, hemolytic uremic syndrome (HUS) and death. Unlike E. coli O157:H7, these non-O157 STEC strains are not readily detected by simple culture methods. Consequently, little is known about their epidemiology or overall public health significance. The recent availability of commercial assays that can detect non-O157 STEC now makes efforts to monitor these organisms practical." The State Public Health Laboratory is looking into the use of Real-time PCR to detect these isolates, in addition to the EIA test we are currently using as routine surveillance.

Figure One.
Figure One is a comparison of the current month to that month in the previous five years. Figure one is based on the ratio of current month total to mean of 15 monthly totals (from previous, comparable, and subsequent months for the past 5 years). The upper limit is based on 1 + (2* (SD/X)) the mean and two standard deviations. The lower limit is based on 1 - (2*(SD/X)) the mean and two standard deviations. By comparing the ratio to the limits we can determine if disease approaches or exceeds historical limits

October Figure One, Missouri 2002



Provisional data, Monday, December 16, 2002